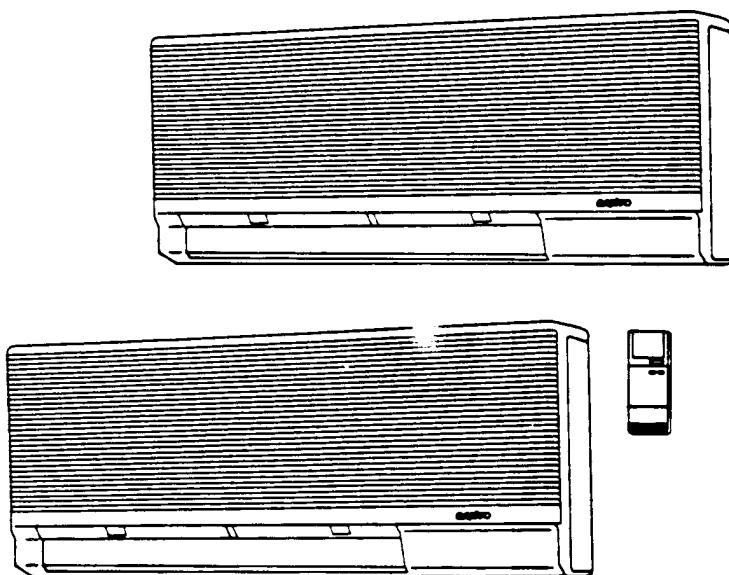


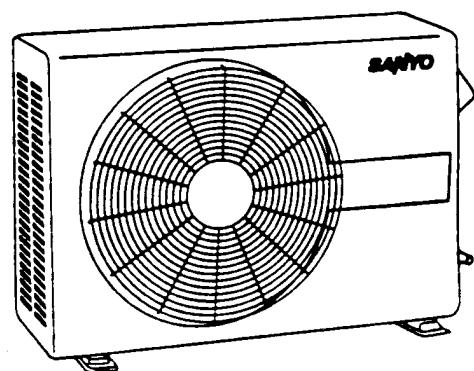
CM1812 / KMS0912(×2)

SPLIT SYSTEM AIR CONDITIONER

Indoor Unit



Outdoor Unit



CM1812

KMS0912



1. OPERATING RANGE

CM1812 / KMS0912(x2)

Temperature	Indoor Air Intake Temp.	Outdoor Air Intake Temp.
Maximum	95°F DB / 71°F WB	115°F DB
Minimum	67°F DB / 57°F WB	67°F DB

IMPORTANT!

Please Read Before Starting

This air conditioning system meets strict safety and operating standards. As the installer or service person, it is an important part of your job to install or service the system so it operates safely and efficiently.

For safe installation and trouble-free operation, you must:

- Carefully read this instruction booklet before beginning
- Follow each installation or repair step exactly as shown
- Observe all local, state, and national electrical codes
- Pay close attention to all danger, warning, and caution notices given in this manual



DANGER:

This symbol warns of an immediate hazard which will result in severe personal injury or death.



WARNING:

This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.



CAUTION:

This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

If Necessary, Get Help

These instructions are all you need for most installation sites and maintenance conditions. If you require help for a special problem, contact our sales/service outlet or your certified dealer for additional instructions.

In Case of Improper Installation

The manufacturer shall in no way be responsible for improper installation or maintenance service, including failure to follow the instructions in this document.

SPECIAL PRECAUTIONS

When Wiring

ELECTRICAL SHOCK CAN CAUSE SEVERE PERSONAL INJURY OR DEATH. ONLY A QUALIFIED, EXPERIENCED ELECTRICIAN SHOULD ATTEMPT TO WIRE THIS SYSTEM.

- Do not supply power to the unit until all wiring and tubing are completed or reconnected and checked.
- Highly dangerous electrical voltages are used in this system. Carefully refer to the wiring diagram and these instructions when wiring. Improper connections and inadequate grounding can cause accidental injury or death.
- Ground the unit following local electrical codes.

- Connect all wiring tightly. Loose wiring may cause overheating at connection points and a possible fire hazard.

When Transporting

Be careful when picking up and moving the indoor and outdoor units. Get a partner to help, and bend your knees when lifting to reduce strain on your back. Sharp edges or thin aluminum fins on the air conditioner can cut your fingers.

When Installing...

...In a Ceiling or Wall

Make sure the ceiling/wall is strong enough to hold the unit's weight. It may be necessary to construct a strong wood or metal frame to provide added support.

...In a Room

Properly insulate any tubing run inside a room to prevent "sweating" that can cause dripping and water damage to walls and floors.

...In Moist or Uneven Locations

Use a raised concrete pad or concrete blocks to provide a solid, level foundation for the outdoor unit. This prevents water damage and abnormal vibration.

...In an Area with High Winds

Securely anchor unit down with bolts and metal frame. Provide a suitable air baffle.

...In a Snowy Area (for Heat Pump-type Systems)

Install the outdoor unit on a raised platform that is higher than drifting snow. Provide snow vents.

When Connecting Refrigerant Tubing

- Keep all tubing runs as short as possible.
- Use the flare method for connecting tubing.
- Apply refrigerant lubricant to the matching surfaces of the flare and union tubes before connecting them, then tighten the nut with a torque wrench for a leak-free connection.
- Check carefully for leaks before starting the test run.

NOTE:

Depending on the system type, liquid and gas lines may be either narrow or wide. Therefore, to avoid confusion the refrigerant tubing for your particular model is specified as either "narrow" or "wide" rather than as "liquid" or "gas."

When Servicing

- Turn the power OFF at the main power box (mains) before opening the unit to check or repair electrical parts.
- Keep your fingers and clothing away from any moving parts.
- Clean up the site after you finish, remembering to check that no scraps or bits of wiring have been left inside the unit being serviced.

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SERVICE MANUAL

CM1812 / KMS0912(×2)

(Basic Information)

2. SPECIFICATIONS

Unit Specifications

Model No.	Outdoor unit	CM1812	
	Applicable indoor unit	KMS0912	
Performance	Cooling		
	No. of indoor units	1	2
Electrical Rating	Capacity	BTU/h kW	9,000 / 8,800 2.64 / 2.58
	Phase, Frequency	Hz	Single, 60
	Voltage rating	V	230 / 208
	Available voltage range	V	187 to 253
	Running amperes	A	4.3 / 4.5
	Power input	W	930 / 910
	Power factor	%	94 / 97
Features	Starting amperes	A	27
	S. E. E. R.	BTU/Wh	10.0 / 10.0
Dimensions & Weight	Fan speeds		1
	Compressor		Rotary
	Refrigerant amount charged at shipment	lbs. (kg)	R-22: 2.16 x 2 (980 x 2)
	Refrigerant control		Capillary tube
	Operation sound	dB-A	54
	Refrigerant tubing connections		Flare type
	Max. allowable tubing length at shipment	ft. (m)	33 (10)
	Limit of tubing length	ft. (m)	50 (15)
	Limit of elevation difference between the 2 units	ft. (m)	23 (7)
	Refrigerant tube o.d.	Narrow tube in. (mm) Wide tube in. (mm)	1/4 (6.35) 3/8 (9.52)
Refrigerant tube kit			Optional
Dimensions & Weight	Height	in. (mm)	24-13/16 (630)
	Width	in. (mm)	32-11/16 (830)
	Depth	in. (mm)	12-13/32 (315)
	Net weight	lbs. (kg)	130 (58.96)
	Shipping volume	cu. ft. (cu. m)	10.34 (0.96)
Shipping weight (Approx.)			136.4 (61.9)

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

Remarks: Rating conditions are: Outside air temperature 95°F DB/75°F WB

Indoor unit entering air temperature 80°F DB/67°F WB

Applicable indoor unit

Model No.			KMS0912
Type			Wall-mounted
Performance	Capacity	BTU/h kW	Cooling 9,000 / 8,800 2.64 / 2.58
	Air circulation (High)	cu. ft./min.	220 / 210
	Moisture removal (High)	pints/h	2.2 / 2.1
Electrical Rating	Phase, Frequency	Hz	Single, 60
	Voltage rating	V	230 / 208
	Available voltage range	V	187 to 253
Features	Controls	Microprocessor	
	Control unit	Wireless remote control unit	
	Temperature control	IC thermostat	
	Timer	ON/OFF 24-hours & Program	
	Fan speeds	3	
	Air deflector	Horizontal / Vertical	
	Air filter	Washable, easy access	
	Operation sound	Hi / Me / Lo	dB-A 45 / 35 / 30
	Refrigerant tubing connections		
	Refrigerant tube o.d.	Narrow tube Wide tube	in. (mm) 1/4 (6.35) 3/8 (9.52)
	Refrigerant tube kit	Optional	
Dimensions & Weight	Accessories	Hanging wall bracket	
	Height	in. (mm) 13-19/32 (345)	
	Width	in. (mm) 31-1/2 (800)	
	Depth	in. (mm) 7-3/32 (180)	
	Net weight	lbs. (kg) 24 (11)	
	Shipping volume	cu. ft. (cu. m) 3.3 (0.093)	
Shipping weight			lbs. (kg) 29 (13)

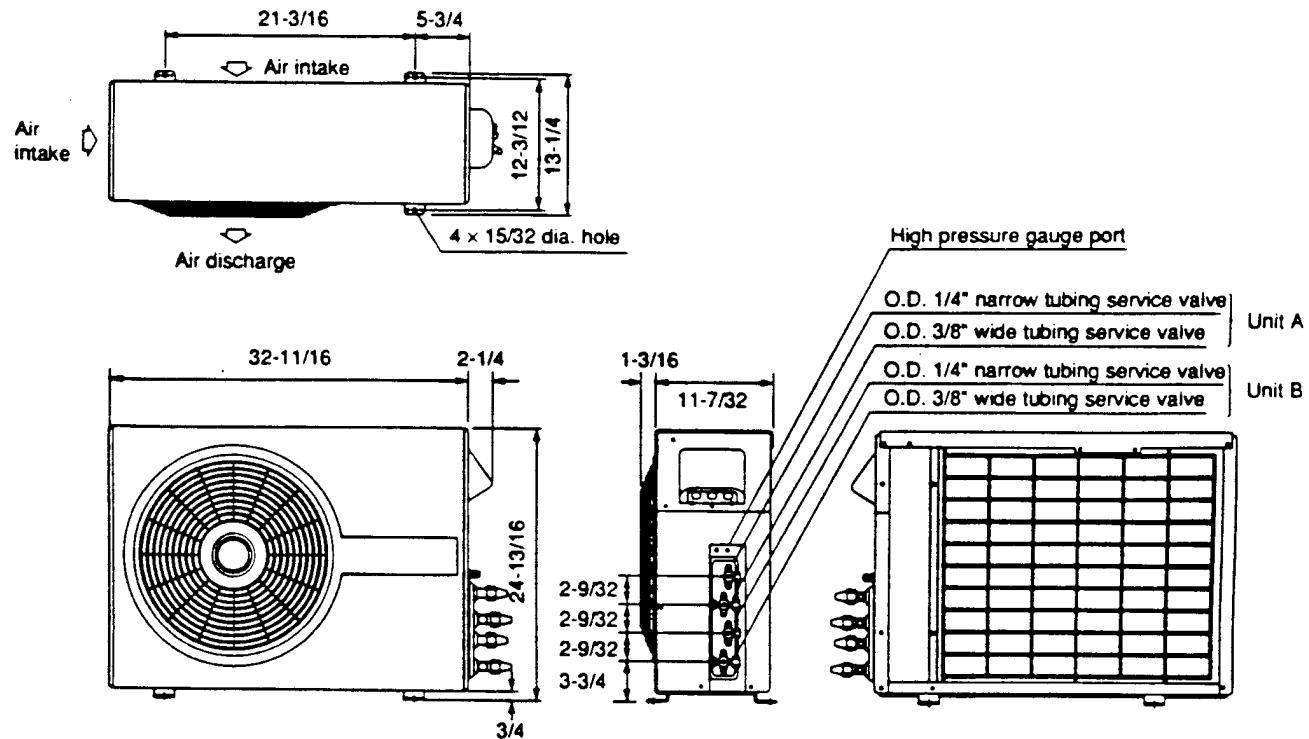
DATA SUBJECT TO CHANGE WITHOUT NOTICE.

Remarks: Rating conditions are: Outside air temperature 95°F DB/75°F WB

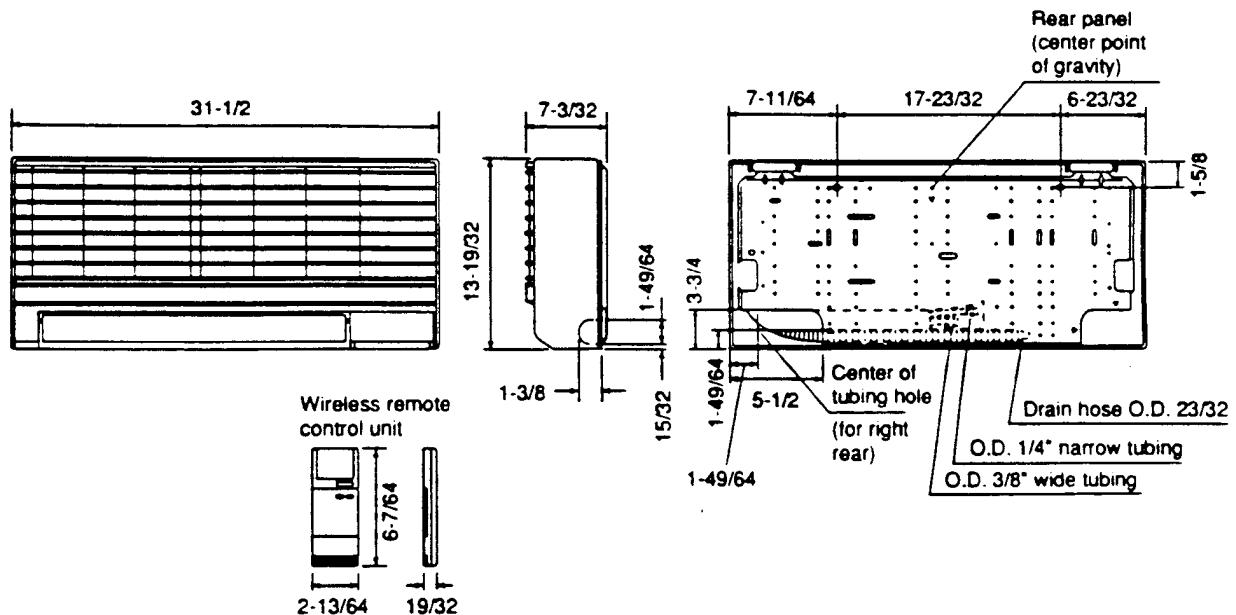
Indoor unit entering air temperature 80°F DB/67°F WB

3. DIMENSIONAL DATA

Outdoor Unit: CM1812



Indoor Unit: KMS0912



4. COOLING CAPACITY

230V

CM1812 / KMS0912x1

Rating Capacity: 9,000 BTU/H			Air Flow Rate: 220 CFM									
Evaporator		Condenser										
Ent. Temp. °F/°C		Ambient Temp. °F/°C										
WB	DB		75 (23.9)	85 (29.4)	95 (35.0)	105 (40.6)	115 (46.1)					
59 (15.0)	72 (22.2) 76 (24.4) 80 (26.7) 84 (28.9) 88 (31.1)	TC kW	8,910 0.65	8,510 0.71	8,100 0.77	7,640 0.83	7,020 0.92					
		SHC	6,300	6,090	5,870	5,640	5,330					
		SHC	7,040	6,830	6,620	6,380	6,070					
		SHC	7,820	7,600	7,390	7,160	6,850					
		SHC	8,560	8,340	8,100	7,640	7,020					
		SHC	8,910	8,510	8,100	7,640	7,020					
		TC kW	9,220 0.65	8,930 0.72	8,580 0.78	8,110 0.85	7,470 0.94					
		SHC	5,350	5,210	5,040	4,820	4,530					
		SHC	6,090	5,950	5,780	5,560	5,270					
		SHC	6,870	6,730	6,560	6,340	6,040					
63 (17.2)	72 (22.2) 76 (24.4) 80 (26.7) 84 (28.9) 88 (31.1)	SHC	7,610	7,470	7,300	7,080	6,780					
		SHC	8,350	8,210	8,040	7,820	7,470					
		TC kW	9,470 0.66	9,320 0.72	*9,000 0.79	8,510 0.86	7,920 0.96					
		SHC	4,370	4,300	4,160	3,950	3,700					
		SHC	5,110	5,040	4,900	4,690	4,440					
		SHC	5,890	5,820	5,680	5,460	5,210					
		SHC	6,630	6,560	6,420	6,200	5,960					
		SHC	7,370	7,300	7,160	6,950	6,700					
		TC kW	9,770 0.67	9,600 0.73	9,360 0.80	8,940 0.88	8,420 0.98					
		SHC	3,360	3,290	3,200	3,030	2,830					
71 (21.7)	72 (22.2) 76 (24.4) 80 (26.7) 84 (28.9) 88 (31.1)	SHC	4,100	4,030	3,940	3,770	3,570					
		SHC	4,880	4,810	4,710	4,550	4,340					
		SHC	5,620	5,550	5,450	5,290	5,090					
		SHC	6,360	6,290	6,200	6,030	5,830					
		TC kW	9,950 0.68	9,850 0.74	9,630 0.81	9,290 0.90	8,910 1.00					
		SHC	3,090	3,050	2,970	2,850	2,720					
		SHC	3,870	3,830	3,750	3,630	3,490					
		SHC	4,610	4,570	4,490	4,370	4,230					
		SHC	5,350	5,310	5,230	5,110	4,980					

TC: Total Cooling Capacity (BTU/H)

SHC: Sensible Heat Capacity (BTU/H)

kW: Compressor Input (kW)

Remarks: Rating conditions (* mark) are: Outside ambient temperature 95°F DB

Indoor unit entering air temperature 80°F DB/67°F WB

Rating Capacity: 8,800 BTU/H			Air Flow Rate: 210 CFM									
Evaporator		Condenser										
Ent. Temp. °F/(°C)		Ambient Temp. °F/(°C)										
WB	DB		75 (23.9)	85 (29.4)	95 (35.0)	105 (40.6)	115 (46.1)					
59 (15.0)		TC kW	8,710 0.64	8,320 0.70	7,920 0.76	7,470 0.82	6,860 0.90					
	72 (22.2)	SHC	6,150	5,940	5,730	5,500	5,190					
	76 (24.4)	SHC	6,860	6,650	6,440	6,210	5,910					
	80 (26.7)	SHC	7,610	7,400	7,190	6,960	6,650					
	84 (28.9)	SHC	8,320	8,110	7,900	7,470	6,860					
	88 (31.1)	SHC	8,710	8,320	7,920	7,470	6,860					
63 (17.2)		TC kW	9,010 0.65	8,730 0.71	8,390 0.77	7,930 0.84	7,300 0.92					
	72 (22.2)	SHC	5,230	5,090	4,930	4,710	4,420					
	76 (24.4)	SHC	5,950	5,810	5,640	5,420	5,130					
	80 (26.7)	SHC	6,690	6,550	6,390	6,170	5,880					
	84 (28.9)	SHC	7,410	7,270	7,100	6,880	6,590					
	88 (31.1)	SHC	8,120	7,980	7,820	7,600	7,300					
67 (19.4)		TC kW	9,260 0.65	9,110 0.71	*8,800 0.78	8,320 0.85	7,740 0.94					
	72 (22.2)	SHC	4,280	4,210	4,070	3,860	3,620					
	76 (24.4)	SHC	4,990	4,930	4,790	4,580	4,330					
	80 (26.7)	SHC	5,740	5,670	5,540	5,320	5,080					
	84 (28.9)	SHC	6,450	6,390	6,250	6,040	5,790					
	88 (31.1)	SHC	7,170	7,100	6,960	6,750	6,510					
71 (21.7)		TC kW	9,550 0.66	9,390 0.72	9,150 0.79	8,740 0.87	8,230 0.96					
	72 (22.2)	SHC	3,300	3,240	3,140	2,980	2,780					
	76 (24.4)	SHC	4,020	3,950	3,860	3,690	3,490					
	80 (26.7)	SHC	4,760	4,700	4,600	4,400	4,240					
	84 (28.9)	SHC	5,480	5,410	5,320	5,150	4,960					
	88 (31.1)	SHC	6,190	6,130	6,030	5,870	5,670					
75 (23.9)		TC kW	9,730 0.67	9,630 0.73	9,420 0.80	9,080 0.89	8,710 0.99					
	76 (24.4)	SHC	3,040	3,000	2,920	2,800	2,670					
	80 (26.7)	SHC	3,790	3,750	3,670	3,550	3,420					
	84 (28.9)	SHC	4,500	4,460	4,390	4,270	4,140					
	88 (31.1)	SHC	5,210	5,180	5,100	4,980	4,850					

TC: Total Cooling Capacity (BTU/H)

SHC: Sensible Heat Capacity (BTU/H)

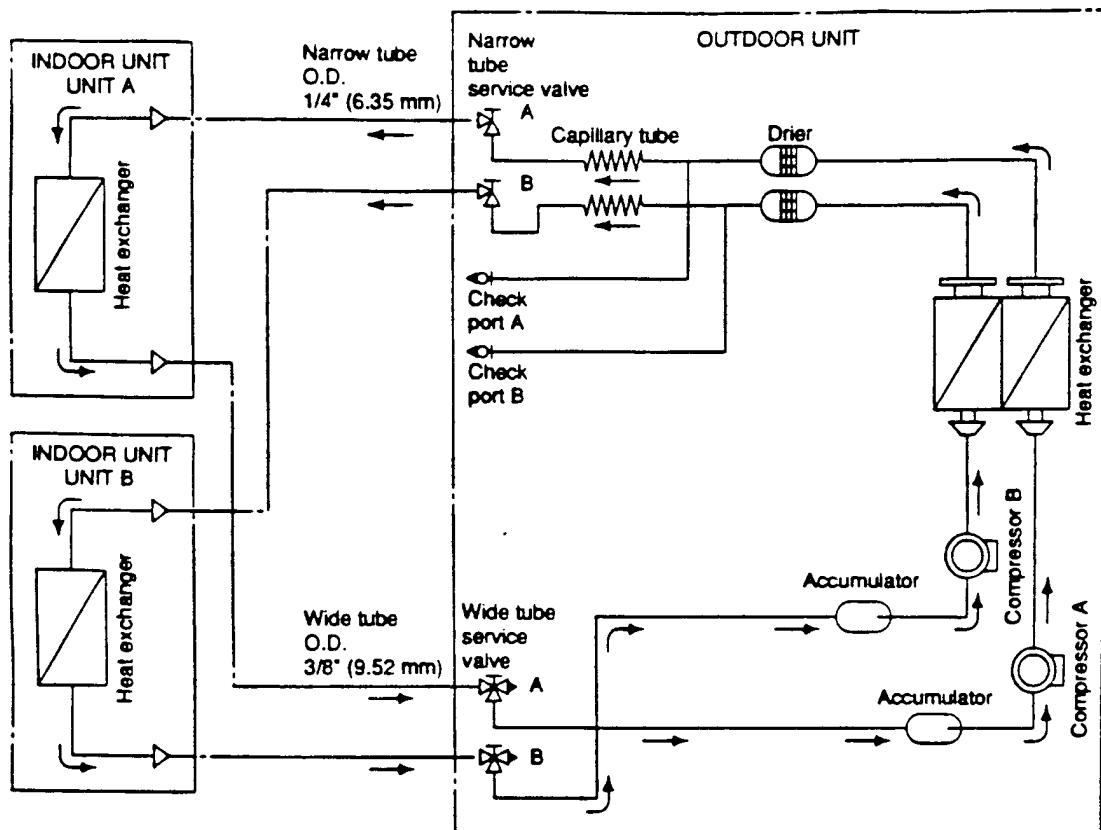
kW: Compressor Input (kW)

Remarks: Rating conditions (* mark) are: Outside ambient temperature 95°F DB

Indoor unit entering air temperature 80°F DB/67°F WB

5. REFRIGERANT FLOW DIAGRAM

CM1812 / KMS0912(×2)



6. ELECTRICAL DATA

● Electrical Characteristics

CM1812 / KMS0912x1

Performance at 230/208V - 1 ϕ - 60Hz		Indoor Unit		Outdoor Unit		Complete Unit
		Fan Motor	Fan Motor	Compressor		
Rating Conditions	A	0.15 / 0.14	0.47 / 0.47	3.68 / 3.89	4.3 / 4.5	—
	W	34 / 28	110 / 100	786 / 782	930 / 910	—
Locked-Rotor Amperes	A	0.19 / 0.18	0.72 / 0.65	27	—	—

Remarks: Rating conditions are: Outside air temperature 95°F DB/75°F WB
Indoor unit entering air temperature 80°F DB/67°F WB

CM1812 / KMS0912x2

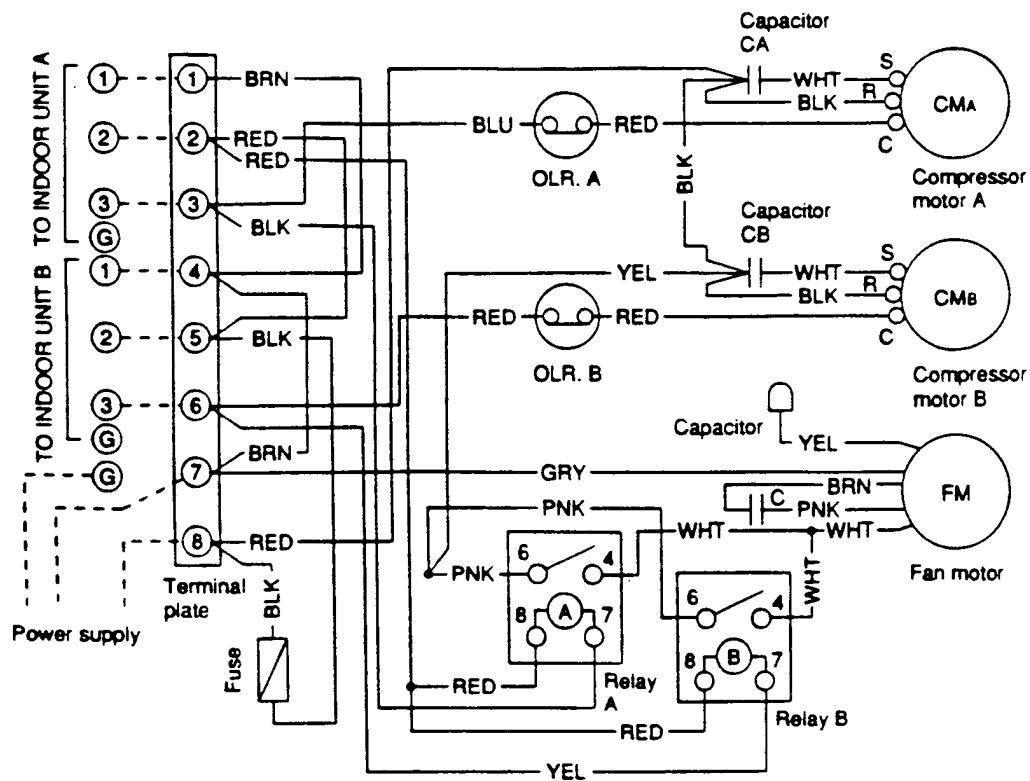
Performance at 230/208V - 1 ϕ - 60Hz		Indoor Units	Outdoor Unit		Complete Unit
			Fan Motor	Compressor	
Rating Conditions	A	0.30 / 0.28	0.47 / 0.47	7.83 / 8.25	8.6 / 9.0
	W	68 / 56	110 / 100	1,682 / 1,664	1,860 / 1,820
Locked-Rotor Amperes	A	0.19 x 2 / 0.18 x 2	0.72 / 0.65	27 x 2	—

Remarks: Rating conditions are: Outside air temperature 95°F DB/75°F WB
Indoor unit entering air temperature 80°F DB/67°F WB



WARNING:

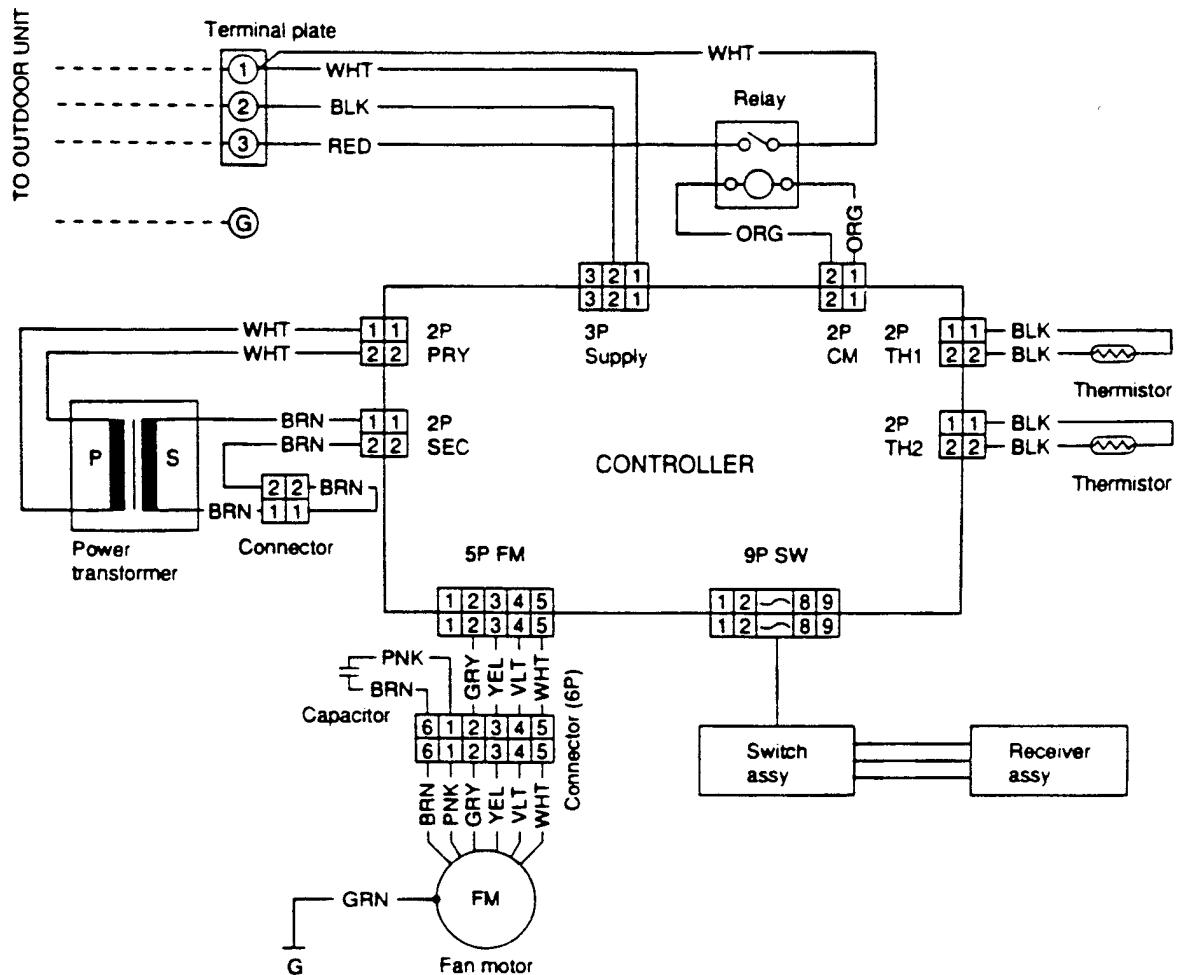
To avoid electrical shock hazard, be sure to disconnect power before checking, servicing and/or cleaning any electrical parts.





WARNING:

To avoid electrical shock hazard, be sure to disconnect power before checking, servicing and/or cleaning any electrical parts.



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WM-700826